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**Duke University
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Research Update

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Dr. Deborah Fisher Wins REGAL Award

Deborah Fisher, M.D., M.H.S., is the 2004 winner of the Research Excellence in GI and Liver (REGAL) award. She received the award during the REGAL Awards Symposium in Miami, Florida, October 8-10. Dr. Fisher is a research associate in the Durham's Center for Health Services Research in Primary Care, an assistant professor of medicine at Duke University School of Medicine, an associate member of the Duke Comprehensive Cancer Center, and a staff physician for the Durham VA Medical Center.

The REGAL Awards Program "seeks to identify junior faculty members" who "demonstrate the ability to conduct important research in the areas of upper GI, lower GI, endoscopy, outcomes, or hepatobiliary research." Awards are based on a research publication that is "judged on originality, significance, and impact of the published research" along with "the individual's overall research credentials and productivity" by key opinion leaders in each of the five award areas. Dr. Fisher's publication was "Mortality and Follow-Up Colonoscopy after Colorectal Cancer," which appeared in the April 2003 issue of *The American Journal of Gastroenterology*. The award carries a \$5,000 prize.

HSR&D Welcomes New Faculty Member

Health Services Research and Development welcomes Stewart Alexander, Ph.D., who began as a new faculty member October 1. He will be working on a Fetzer grant with the Center for Palliative Care. The Fetzer grant seeks to evaluate the extent to which engaging in discussions of life completion influences physical, psychosocial, and spiritual aspects of the dying process.

After receiving his Ph.D. in Speech Communication from the University of Illinois at Urbana-Champaign in 2002, Dr. Alexander began at Health Services Research on a two-year Office of Academic Affairs-funded post-doctoral fellowship in November of that same year. During his fellowship, Dr. Alexander worked with James Tulskey, M.D., and Karen Steinhauer, Ph.D., in the Center for Palliative Care, focusing on patient/physician communication.

"When I first came to Health Services Research, my focus was on communication in dealing with end of life issues" says Dr. Alexander. "One thing we examined was how to improve physician communication by looking at how physicians talk to patients about bad news or treatment options. The main focus was how to evaluate physician communication training programs. We worked on developing a coding system for a number of studies that looked at how medical house staff and oncology fellows communicated concerning end-of-life issues."

"During that time, however, my interests broadened to look at more than end of life issues. Now, I'm also interested in extending my research to also include looking at more difficult conversations that general physicians might encounter everyday, such as obesity and smoking cessation. We're hoping to look at the ways different physicians approach these difficult topics in an attempt to begin to understand ways to approach these more sensitive issues with patients."

Dr. Alexander's role in the Fetzer grant will be to analyze the ways hospice patients talk about issues of life completion and forgiveness, from the forming of the concepts to analyzing the discourse. "My immediate focus," says Dr. Alexander, "will be to develop a measurement tool to analyze conversations so that we can quantify this qualitative data that we call conversations."

*HSR&D Center of Excellence in Primary Care • Women's Health Research Program
Program on the Medical Encounter & Palliative Care*

HSR&D Welcomes New M.D. Fellow

The Center would like to welcome Carla Wheaton Brady, M.D., as a new Health Services Research and Development research fellow, beginning this past August. Her career interests are to conduct clinical research in hepatology as an academic physician, with an emphasis in hepatitis C and liver transplantation.

Dr. Brady received a B.A. in Psychology and her M.D. from the University of Virginia in 1993 and 1997, respectively. She did a one-year internship in internal medicine at the MCP-Hahnemann College of Medicine at Drexel University in Philadelphia, and a one-year residency in general surgery at the University of Illinois at Chicago, from 1997 through 1999. She did a two-year residency in internal medicine at MCP-Hahnemann College of Medicine at Drexel University from 2000 through 2002, where she spent her last year as the chief resident in internal medicine. From 2002 to 2004 Dr. Brady was a fellow in gastroenterology and hepatology at Drexel University as well.



"My interest is to acquire more training in statistical analysis, research design and management," says Dr. Brady, "and a more medically relevant training in the quantitative principles and methodology of clinical research."

"The Health Services Research and Development Program can provide me with opportunities to gain training in these areas as well as in research methodology and scientific writing," says Dr. Brady, "and broaden my administrative and managerial skills. I believe it will help me learn how to apply such skills to clinical practice and research development. My goal is to utilize the skills acquired through the program to conduct clinically meaningful hepatology research, teach students and residents about the clinical and basic science aspects of liver disease, and care for patients with liver disease."

Dr. Brady is a recipient of numerous honors and awards. She is also a member of the American Gastroenterological Association, the American Association for the Study of Liver Diseases, and the American College of Gastroenterology.

Congestive Heart Failure and Quality of Life

Maintaining physical, mental and social functioning are important components to congestive heart failure (CHF) patients' perceptions of health or illness, according to researchers of the Durham VAMC's Center for Health Services Research in Primary Care. These results were published in the January 2004 issue of *Aging & Mental*

Health.^{*} These findings were observed despite the success of medical and surgical therapies that have traditionally been evaluated with objective physiological data.

Congestive heart failure affects four to five million older Americans and is the most common cause of hospitalization for Americans as well. The authors reported that most of the early measures for health related quality of life for patients with CHF relied on clinician-defined criteria, but there is often a gap between the physician's objective assessment and the patient's perception of his or her own health.

The researchers report "patients with CHF are acutely aware of not only the host of functional decrements but also the concomitant psychosocial dimensions that mark life with this chronic illness." Patients reported quality of life concerns related to the unpredictability of the disease trajectory and feelings of hopelessness and frustration with changes in their life's roles and limitations, tangible and emotional support, a loss of independence, and a fear of burdening family and friends.

The researchers interestingly found a positive, uplifting dimension as well. "Congestive heart failure quality of life measures often are structured as deficiency checklists, and therefore do not account for the personal growth and normalization that may occur while living with a chronic disease," notes the authors. "We found strong support for adaptation to this progressive illness in which people are able to maintain equilibrium or even thrive in the face of increasing health threats," leading the researchers to add that "a measure that captures what quality of life means for patients should consider adaptation and coping and not merely focus on limitations." The researchers also concluded that support for psychosocial adjustment to illness, plus maintaining and stabilizing a patient's limited functional abilities, should be part of an overall effective treatment strategy, and may result in reduced health service utilization and morbidity.

The study cautioned that though social support or social networks can have a cumulative positive and beneficial affect on a patient's quality of life, not all social and personal relationships are supportive or beneficial.

^{*}Bosworth HB, Steinhauser KE, Orr M, Lindquist JH, Grambow SC, Oddone EZ. "Congestive heart failure patients' perceptions of quality of life: the integration of physical and psychosocial factors" *Aging & Mental Health* 2004 (January); 8(1): 83-91.

Poststroke Cognitive Impairment and Rehabilitation

Cognitively impaired stroke patients experience more limited recovery of instrumental activities of daily living (IADL) than stroke patients without cognitive impairment, according to researchers of Durham VA's Center for Health Services Research in Primary Care. In a study published in the July 2004 issue of *Archives in Physical Medicine and*

Rehabilitation,* the authors noted that cognitive impairment restricts six-month outcomes despite provision of similar rehabilitative care in stroke patients with or without cognitive impairment. The study involved 288 stroke patients hospitalized in 11 different VA high-volume medical centers and were followed up for six months after stroke onset.

The researchers found that though nearly all patients with cognitive impairment received a mental status assessment at some point in their follow-up care, only 55% of those who needed it had treatment goals documented for cognition, although treatment goals for physical impairment were documented at a 93% rate. The researchers concluded “one possible explanation for the disparity between rates of cognitive screening and the implementation of cognitive treatment is that those particular cognitive deficits that have an impact on the rehabilitation process and outcomes are under-diagnosed through cognitive screening.”

Similar referral rates and quality of care for cognitively impaired adults as non-cognitively impaired adults may not be enough to maintain parity of outcomes. There is evidence that providing different or more extensive rehabilitation care for cognitively impaired patients may yield improved outcomes; patients who receive “targeted cognitive rehabilitation show increased functional outcomes and improved cognitive performance.” However, there is a widespread perception that stroke-induced cognitive impairment is not responsive to therapy.

The researchers also observed that, although post-stroke cognitive impairment is associated with higher rates of depression, documented evaluation for depression was lacking in more than 50% of the cognitively impaired patients in the study. This suggests that post-stroke depression is being under-diagnosed.

The researchers suggest that recovery of stroke patients with cognitive impairment might be improved by enhanced diagnosis and appropriately targeted rehabilitation services. The authors also conclude “Further research documenting the interaction between cognition and rehabilitative content on the recovery of a wide range of functions among stroke patients is warranted.”

*Zinn S, Dudley TK, Bosworth HB, Hoenig HM, Duncan PW, Horner RD. “The Effect of Poststroke Cognitive Impairment on Rehabilitation Process and Functional Outcomes” *Archives of Physical Medicine and Rehabilitation* 2004 (July); 85(7): 1084-1090.

Validation of the Quality of Life at the End of Life (QUAL-E) Instrument

In the December 2002 issue of the *Journal of Palliative Medicine*, Karen Steinhauser, Ph.D., along with her research colleagues, presented a new instrument known as the QUAL-E, designed to assess the quality of life at the end of life for patients with a range of advanced serious illnesses. The measure was developed for implementation in a variety of

settings, and among patients who may or may not define themselves as dying. The instrument was based on qualitative and quantitative accounts of what serious ill patients, recently bereaved family members, and various health care providers considered important at the end of life.

Now, in a follow-up study,* Dr. Steinhauser, and her colleagues, Elizabeth Clipp, Ph.D., Hayden Bosworth, Ph.D., Maya McNeilly, Ph.D., Nicholas Christakis, M.D., Ph.D., Corrine Voils, Ph.D., and James Tulsky, M.D., set out to further examine the reliability and validity of the QUAL-E. Specifically, they examined how well the measure was associated with existing relevant measures, its robustness across diverse sample groups, and stability over time.

The study was conducted at the Durham VA Medical Center and the Duke University Medical Center and included 248 patients with stage IV cancer, congestive heart failure, chronic obstructive pulmonary disease, or dialysis-dependent end stage renal disease. The QUAL-E was compared with five other quality of life measures: FACIT quality of life measure, Missoula-VITAS Quality of Life Index, FACIT-SP spirituality measures, Participatory Decision Making Scale (MOS), and Duke EPESE social support scales.

The researchers confirmed that the QUAL-E consisted of four domains of quality of life at the end of life. One of these, symptom impact, a measure in other quality of life instruments, was moderately correlated with a sense of both mental and emotional wellbeing. But while the researchers believe the QUAL-E domains relate appropriately to substantively similar domains found in other existing quality of life instruments, the QUAL-E offers additional constructs such as preparation, relationship with health care provider, and completion, all not currently measured in other instruments measuring quality of life among dying patients. The domain of preparation included patient concern about being a burden to family and others around them, reflection on life's regrets, and perception of the extent of one's family's preparation for the patient's death. The patient's relationship with the health care provider includes concerns of participating in decision about health care, knowing what to expect about the course of the illness, knowing where to get answers to healthcare concerns, feeling control over treatment decisions, and feeling known as a whole person by their health care providers. The last, concerned with life completion, touched on issues of meaning and peace. The domain also assessed a patient's sense of interpersonal connection and the ability to help others at the end of life.

The researchers state “The instrument presented ... is offered as a way to assess the quality of experience of patients at this challenging time” and that the “QUAL-E demonstrates acceptable psychometric properties, including structural validity, internal consistency, test-retest reliability, and construct validity.”

“Though designed primarily as an evaluation tool to benchmark the impact of interventions to improve care,” the

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Research Update



Department of
Veterans Affairs

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researchers further conclude, “it also may be useful clinically to highlight patient concerns and remind us of the paradoxical nature of the end of life that holds potential for both decline and growth.”

*Steinhauser KE, Clipp EC, Bosworth HB, McNeilly M, Christakis NA, Voils CI, Tulsy JA. “Measuring quality of life at the end of life: Validation of the QUAL-E” *Palliative and Supportive Care* 2004; 2: 3-14.

Recent Faculty Publications

BASTIAN LA, West NA, Corcoran C, Munger RG. “Number of children and the risk of obesity in older women” *Preventive Medicine* 2005; 40:99-104 (online issue) www.sciencedirect.com

FISHER DA, Martin C, Galanko J, Sandler RS, Noble MD, **PROVENZALE D**. “Risk factors for advanced disease in colorectal cancer” *American Journal of Gastroenterology* 2004 (Oct.); 99(10):2019-2024.

Steinman, MA., Fischer, MA., Shiplak, MG, **BOSWORTH HB**, **ODDONE EZ**, Hoffman BB, Goldstein MK. “Clinician Awareness of Adherence to Hypertension Guidelines?” *American Journal of Medicine* 2004 (Nov.); 117(10):747-754.

HONG TB, **ODDONE EZ**, Weinfurt KP, Friedman J, Schulman K, **BOSWORTH HB**. “The relationship between perceived barriers to healthcare and self-rated health” *Psychology, Health, and Medicine* 2004; 9(4):476-482.

SULTAN S, **FISHER DA**, **VOILS C**, Kinney AY, Sandler RS, **PROVENZALE D**. “The impact of functional support on health related quality of life in colon cancer patients” *Cancer* 2004;101:2737-2743.

ODDONE EZ, **OLSEN MK**, **LINDQUIST JH**, **ORR M**, Horner R, Reda D, Lavori P, Johnson G, Collins J, Feussner JR. “Enrollment in clinical trials according to patients race: experience from the VA Cooperative Studies Program (1975-2000)” *Controlled Clinical Trials* 2004; 25(4): 378-387.

Research Update is published by the Health Services Research and Development Service, Department of Veterans Affairs Medical Center, Durham. For questions or comments contact Beth Armstrong, Administrative Officer, VAMC (152), 508 Fulton Street, Durham NC, 27705. Telephone: (919) 286-6936, Fax: (919) 416-5836. E-mail: beth.armstrong@duke.edu Web Page: <http://hsrd.durham.med.va.gov/> The Institute’s mission is to provide quality information on issues regarding the organization, financing, and delivery of veterans’ health care, and to build the epidemiological capacity of the Veterans Health Administration through the generation, synthesis, and dissemination of epidemiological information. The Institute also has a mission to educate health professionals through a spectrum of training grants in the techniques of health services and epidemiological research.